

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
Amendment of Part 2 of the Commission's)	
Rules to Allocate Spectrum Below 3 GHz for)	ET Docket No. 00-258
Mobile and Fixed Services to Support the)	
Introduction of New Advanced Wireless)	
Services, including Third Generation Wireless)	
Systems)	
The Establishment of Policies and Service)	
Rules for the Mobile-Satellite Service in the 2)	IB Docket No. 99-81
GHz Band)	
Amendment of the U.S. Table of Frequency)	
Allocations to Designate the 2500-2520/2670-)	RM-9911
2690 MHz Frequency Bands for the Mobile-)	
Satellite Service)	
Petition for Rule Making of the Wireless)	
Information Networks Forum Concerning the)	RM-9498
Unlicensed Personal Communications Service)	
Petition for Rule Making of UTStarcom, Inc.,)	
Concerning the Unlicensed Personal)	RM-10024
Communications Service)	

**OPPOSITION AND COMMENTS OF
THE BOEING COMPANY**

The Boeing Company ("Boeing"), by its attorneys and pursuant to Section 1.429 of the Commission's Rules, 47 C.F.R. § 1.429, hereby opposes the Petition for Reconsideration filed by the Cellular Telecommunications & Internet Association ("CTIA") and expresses its support for the Petition for Reconsideration filed by the Satellite Industry Association ("SIA") in the above referenced proceeding.

I. CTIA'S PETITION IS BASED ON MISREPRESENTATIONS OF THE COMMISSION'S CONCLUSIONS AND SHOULD THEREFORE BE REJECTED

In its Petition for Reconsideration, CTIA inaccurately accuses the Commission of inconsistent and arbitrary decision making. CTIA claims that, in retaining 20 MHz of paired

spectrum for the 2 GHz Mobile-Satellite Service (“MSS”), the Commission (1) articulated no public interest rationale for retaining a 2 GHz MSS allocation, (2) failed to require MSS licensees to demonstrate a need for additional spectrum, and (3) reversed an earlier decision to limit MSS licensees to “no more than the seven megahertz of spectrum that they were originally assigned.”¹

CTIA is incorrect about each of its assertions. Therefore, the Commission should reject CTIA’s petition and permit 2 GHz MSS licensees to continue construction of their licensed satellite systems in order to provide new services to the public.

A. The Commission Identified Substantial Public Interest Benefits That Would be Achieved Through Continued Development of 2 GHz MSS Systems

CTIA claimed in its petition that the Commission failed to articulate a public interest rationale for maintaining an allocation for 2 GHz MSS.² In fact, the Commission specifically considered the potential public interest benefits of 2 GHz MSS services as a part of this proceeding and articulated these benefits in the order that was released in the Commission’s companion proceeding on providing additional flexibility for MSS networks.³

The Commission observed that MSS systems offer “instant global communications for civilians, public-safety organizations, and the military in areas where terrestrial facilities do not

¹ *Petition for Reconsideration of the Cellular Telecommunications & Internet Association*, ET Docket No. 00-258, et al., at 2-4 (Apr. 14, 2003) (“*CTIA Petition*”).

² *See id.* at 3.

³ *See Amendment of Part 2 of the Commission’s Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, including Third Generation Wireless Systems*, Second Memorandum Opinion and Order, Third Notice of Proposed Rulemaking, and Second Memorandum Opinion and Order, FCC 03-16, ¶ 75 (Feb. 10, 2003) (“*Reallocation Order*”) (indicating that the public interest benefits of retaining a 2 GHz MSS allocation are articulated in the Commission’s ATC proceeding).

exist or do not function.”⁴ MSS systems also enable law-enforcement, aid agencies and the public to communicate “from remote locations on the land, on the sea or in the air through a single telephone number.”⁵ Furthermore, MSS systems enhanced with an ancillary terrestrial component (“ATC”) can improve the nation’s overall ability to maintain critical telecommunications infrastructure in times of crisis or disaster.⁶

The Commission identified additional public interest benefits in its order establishing service rules for 2 GHz MSS networks.⁷ The Commission observed that satellites are an “excellent technology” for delivering basic and advanced telecommunications services to rural unserved communities.⁸ The Commission also concluded that identifying specific spectrum for expansion and growth of 2 GHz MSS systems would advance the Commission’s goals of “achieving universal access to telecommunications services as early as possible.”⁹

The record is therefore fully supportive of the Commission’s decision to maintain an allocation of 20 MHz of paired spectrum for 2 GHz MSS networks that have already been licensed and are under development.

⁴ *Flexibility for Delivery of Communications by Mobile Satellite Service Providers in the 2 GHz Band, the L-Band, and the 1.6/2.4 GHz Bands*, Report and Order and Notice of Proposed Rulemaking, FCC 03-15, ¶ 28 (Feb. 10, 2003) (“ATC Order”).

⁵ *Id.*

⁶ *See id.*, ¶ 29.

⁷ *Establishment of Policies and Service Rules for the Mobile Satellite Service in the 2 GHz Band*, Report and Order, FCC 00-302, 15 FCC Rcd 16127 (2000) (“2 GHz MSS Order”).

⁸ *Id.*, ¶¶ 33, 34.

⁹ *Id.*, ¶ 39.

B. The Commission Required 2 GHz MSS Licensees to Demonstrate in Detail Their Individual Spectrum Requirements

CTIA incorrectly claims in its petition that the Commission failed to require MSS licensees to demonstrate a need for expansion spectrum for 2 GHz systems.¹⁰ In fact, the Commission has throughout the various 2 GHz MSS proceedings scrutinized heavily the specific spectrum needs of individual 2 GHz MSS licensees. For example, in its 1997 application, Boeing requested the use of just over 8 MHz of paired spectrum.¹¹ Boeing provided a number of technical showings substantiating this spectrum request,¹² and no party questioned Boeing's analysis.

Based on the spectrum requirements of Boeing and other MSS applicants, the Commission acknowledged in its *2 GHz MSS Order* the goals of (1) authorizing a guaranteed minimum amount of spectrum to each licensee and (2) setting a mechanism for systems to increase their amount of authorized spectrum when needed.¹³ To accommodate these goals, the Commission adopted a band plan that allocated spectrum to each licensee based on the total number of systems licensed and created expansion spectrum for future operations.¹⁴ Pursuant to this band plan, the Bureau was authorized by the Commission to license each 2 GHz MSS applicant to operate in 3.88 MHz of spectrum, with additional spectrum designated for expansion.¹⁵

¹⁰ See *CTIA Petition* at 3.

¹¹ See The Boeing Company, *Satellite System Application in the 2 GHz Mobile-Satellite Service & Aeronautical Radionavigation-Satellite Service*, File No. 179-SAT-P/LA-97(16), at 4 (Sept. 26, 1997) ("*Boeing 2 GHz Application*"). Boeing requested in its application 8.25 MHz of uplink transmission spectrum and 8.85 MHz of downlink transmission spectrum.

¹² See, e.g., Letter from Philip L. Malet and David A. Nall, Counsel to The Boeing Company, to Magalie Roman Salas, FCC, IB Docket No. 99-81, at 1 (filed July 20, 2001).

¹³ See *2 GHz MSS Order*, ¶¶ 13, 35.

¹⁴ See *id.*, ¶¶ 16-18.

¹⁵ See *id.*, ¶ 16 (creating a formula based on the number of licensed systems).

The Bureau would have been fully justified if it had issued licenses pursuant to this 3.88 MHz spectrum plan. As noted above, the record is replete with evidence regarding the public interest need for MSS services, particularly in rural and remote areas of the country.

Furthermore, in the years that have followed the Commission's release of its *2 GHz MSS Order*, the spectrum needs for Boeing's MSS services, particularly for public safety and emergency communication services, have only increased. Neither CTIA, nor any other party has questioned Boeing's analysis or overall spectrum requirements. The Commission should therefore reject CTIA's belated and unfounded suggestion that the Commission never required MSS applicants and licensees to demonstrate a need for expansion spectrum.

C. The Commission has Always Acknowledged the Need for Expansion Spectrum to Support 2 GHz MSS Services

CTIA's third misrepresentation in its petition for reconsideration is its claim that the Commission concluded previously "that the current licensees receive no more than the seven megahertz of bandwidth that they were originally assigned, and all other remaining spectrum should be reallocated."¹⁶

In reality, the Commission never made such a conclusion. Instead, the Commission has always acknowledged that operational 2 GHz MSS networks will need access to expansion spectrum in order to provide services to the public. As discussed in the previous section, the Commission's own formula for determining the amount of spectrum available to 2 GHz MSS operators dictated that each applicant had a reasonable expectation of at least 3.88 MHz in each

¹⁶ *CTIA Petition* at 2.

direction.¹⁷ Furthermore, the Commission decided to provide 2 GHz MSS licensees with additional expansion spectrum upon showings of planned services to rural and remote areas.¹⁸

The Commission did conclude that 3.5 MHz of paired spectrum would be sufficient for each system “to commence operations.”¹⁹ The Commission always left open a clear regulatory path to additional 2 GHz spectrum resources, however, either through spectrum set aside for 2 GHz MSS expansion or through spectrum “abandoned” by other 2 GHz MSS licensees who voluntarily surrendered their licenses or failed to meet the Commission’s strict milestone requirements.

D. The Commission Should no Longer Entertain CTIA’s Transparent Attempts to Warehouse Spectrum Resources

The final reason why the Commission should reject CTIA’s Petition for Reconsideration is because it raises nearly identical arguments as those raised in numerous other petitions and filings that have been submitted to the Commission by CTIA and its member companies in recent years. CTIA has engaged in a concerted effort to take advantage of the current downturn in the economy and the telecommunications sector in order to raid the allocations of other services and warehouse spectrum resources for the speculative purposes of its members.

In this regard, the wireless industry has successfully secured the reallocation of 120 MHz of spectrum for future wireless services.²⁰ Despite these significant new holdings, the wireless

¹⁷ See *2 GHz MSS Order*, ¶ 16-17 (indicating that if some applicants withdraw “the remaining system proponents would receive more than 3.5 megahertz of spectrum upon authorization.”).

¹⁸ See *id.*, ¶ 39.

¹⁹ *Id.*, ¶ 17.

²⁰ In addition to the 30 MHz of spectrum reallocated in this proceeding, the Commission recently reallocated another 90 MHz of spectrum for advanced wireless and 3G services. See *Amendment of Part 2 of the Commission’s Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, Including Third Generation Wireless Systems*, Second Report and Order, 17 FCC Rcd 23193 (2002).

industry has shown little evidence of planned major investments in advanced wireless and 3G services in the current economy. The wireless industry has also failed to attract significant consumer interest in the broadband mobile data services that allegedly formed the basis for the spectrum reallocations that it now enjoys.

The Commission should therefore refrain from making any further reallocations of spectrum between MSS and wireless services, and instead permit the recovery of the telecommunications market determine which services will succeed and in what proportion. The Commission has already demonstrated that it is scrutinizing closely the milestone compliance of 2 GHz MSS licensees. The Commission should give equal scrutiny to the wireless industry in order to ensure that the 120 MHz of reallocated spectrum is rapidly and efficiently used to provide new services to consumers.

II. BOEING SUPPORTS SIA'S REQUEST FOR THE COMMISSION TO RECONSIDER ITS DECISION TO REALLOCATE GLOBALLY ALLOCATED SATELLITE SPECTRUM

SIA filed a petition for reconsideration of the Commission's decision to reallocate globally allocated 2 GHz MSS spectrum, while leaving in place non-globally allocated 2 GHz MSS spectrum. Specifically, in reallocating 30 MHz of 2 GHz MSS spectrum, the Commission eliminated 10 MHz of globally allocated uplink spectrum at 1990-2000 MHz, while leaving in place 10 MHz of non-globally allocated uplink spectrum at 2010-2020 MHz.

As SIA explains in its petition, no legitimate justification was made for disrupting the harmonized global allocation for 2 GHz MSS. Instead, the Commission's decision conflicted with longstanding public policy and the practical experience of the telecommunications industry in developing cost-effective and efficient communications services.

Furthermore, the Commission failed to identify a competing public interest benefit that would outweigh the Commission's long-standing policy of support for globally harmonized spectrum. Potential concerns regarding the possibility of interference to PCS operations at 1930-1990 MHz have not been demonstrated adequately to support the reallocation of globally-allocated 2 GHz MSS spectrum. Furthermore, even if legitimate interference concerns did exist, they could be addressed by additional out-of-band ("OOB") emissions limits (although the Commission has already established OOB limits for 2 GHz MSS systems), or through the development of a guard band that is far smaller than the 10 megahertz guard band that the Commission has effectively created.

III. CONCLUSION

The reasons stated herein, the Commission should reject CTIA's Petition for Reconsideration in this proceeding and should instead make the changes in its decision requested by SIA.

Respectfully submitted,

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May 14, 2003

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing Opposition and Comments of The Boeing Company in ET Docket No. 00-258 and IB Docket No. 99-81 was served this 14th day of May 2003 by U.S. mail to the following:

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A handwritten signature in black ink, appearing to read "Bruce Olcott", is written over a horizontal line.

Bruce Olcott